



IN THE CLAIMS

Please amend the claims as follows:

Claims 1-54 (canceled)

Claim 55 (withdrawn): A sheet feeding device comprising:

a feed roller;

a separation member pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein sheets conveyed into a position between said feed roller and said separation member are separated and conveyed one by one; and

a pressing device configured to cyclically provide a change in the pressure applied between said feed roller and said separation member,

wherein said pressing device is arranged at a side of the sheets, when the sheets are separated and conveyed one by one,

wherein said pressing device is provided on the feed roller, and

wherein said pressing device uses a magnetic force.

Claim 56 (withdrawn): A sheet feeding device comprising:

a feed roller;

a separation member pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein sheets conveyed into a position between said feed roller and said separation member are separated and conveyed one by one; and

a pressing device configured to cyclically provide a change in the pressure applied between said feed roller and said separation member,

wherein said separation member is chosen from a group consisting of 1) a friction pad elastically pressed against and into contact with said feed roller; 2) a friction roller

upwardly and elastically supported by an axis, said axis being rotated by a driving gear and a gear engaged with said driving gear and supported at one side thereof, and said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction; and 3) a reverse roller upwardly and elastically supported by an axis, said axis being rotated by a driving gear and a gear engaged with said driving gear and supported at one side thereof, said reverse roller being arranged at a free end side of the axis via a torque limiter, so as to be rotated in a sheet feeding direction and a direction opposite the sheet feeding direction.

Claim 57 (withdrawn): A sheet feeding device comprising:

a feed roller;

a reverse roller pressed against and into contact with said feed roller with a pressure applied between said feed roller and said reverse roller, said reverse roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said reverse roller being supported at a free end side of said axis and arranged via a torque limiter, so as to be rotated in a sheet feeding direction and a direction opposite the sheet feeding direction, wherein sheets conveyed between said feed roller and said reverse roller are separated and are conveyed one by one; and

a pressing device configured to provide a cyclic change in the pressure applied between said feed roller and said reverse roller, said pressing device being arranged at a side of said reverse roller.

Claim 58 (withdrawn): A sheet feeding device comprising:

a feed roller;

a friction roller pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being upwardly

and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein sheets conveyed between said feed roller and said friction roller are separated and are conveyed one by one; and

a pressing device configured to provide a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing device being arranged at a side of said friction roller.

Claim 59 (withdrawn): The sheet feeding device of claim 57, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said reverse roller makes one rotation.

Claim 60 (withdrawn): The sheet feeding device of claim 58, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said friction roller makes one rotation.

Claim 61 (withdrawn): The sheet feeding device of claim 57, further comprising a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 62 (withdrawn): The sheet feeding device of claim 58, further comprising a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 63 (withdrawn): The sheet feeding device of claim 57, wherein all three of said feed roller, said reverse roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from an image forming apparatus.

Claim 64 (withdrawn): The sheet feeding device of claim 58, wherein all three of said feed roller, said friction roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from an image forming apparatus.

Claim 65 (withdrawn): An image forming apparatus comprising:

an image forming device;

a sheet feeding device configured to convey a sheet to said image forming device, wherein said image forming device is configured to form an image on the sheet conveyed from said sheet feeding device, and said sheet feeding device includes a feed roller and a separation member, said separation member being pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein a plurality of the sheets conveyed between said feed roller and said separation member are separated and conveyed one by one to said image forming device; and

a pressing device configured to cyclically provide a change in the pressure applied between said feed roller and said separation member,

wherein said pressing device is arranged at a side of the sheets, when the sheets are separated and conveyed one by one,

wherein said pressing device is provided on said feed roller, and

wherein said pressing device uses a magnetic force.

Claim 66 (currently amended) An image forming apparatus comprising:

an image forming device configured to form an image on a sheet;

a sheet feeding device configured to convey ~~[[a]]~~ the sheet to said image forming device, ~~wherein said image forming device is configured to form an image on the sheet conveyed from said sheet feeding device, and said sheet feeding device includes~~ including an axis, a driving gear configured to rotate said axis and supporting said axis at one side thereof, a gear engaged with said driving gear, a feed roller and a separation member, ~~said separation~~

~~member being configured to be pressed against and into contact with said feed roller [[with]]~~  
~~at a pressure applied between said feed roller and said separation member, wherein a plurality~~  
~~of the sheets conveyed between said feed roller and said separation member are separated and~~  
~~conveyed one by one to said image forming device; and~~

a pressing device configured to cyclically ~~provide a change~~ [[in]] the pressure applied  
~~between said feed roller and said separation member while conveying a~~ the sheet is conveyed  
~~between said feed roller and said separation member~~[[,]] such that a plurality of sheets  
conveyed between said feed roller and said separation member are separated and individually  
conveyed to said image forming device,

wherein said sheet separation member [[is]] comprises a reverse roller upwardly and  
elastically supported by [[an]] said axis, said axis being rotated by a driving gear and a gear  
engaged with said driving gear and supported at one side thereof, said reverse roller being  
and arranged disposed at a free end side of said axis via a torque limiter, so as to be rotated in  
a sheet feeding direction and a direction opposite the sheet feeding direction.

Claim 67 (currently amended): An image forming apparatus comprising:

an image forming device configured to form an image on a sheet;

a sheet feeding device configured to convey [[a]] the sheet to said image forming  
device, wherein said image forming device forms an image on the sheet conveyed from said  
sheet feeding device, said sheet feeding device including an axis, a driving gear configured to  
rotate said axis and supporting said axis at one side thereof, a gear engaged with said driving  
gear, a feed roller and a reverse roller upwardly and elastically supported by said axis,  
~~wherein said reverse roller is and configured to be pressed against and into contact with said~~  
~~feed roller [[with]]~~ at a pressure applied between said feed roller and said reverse roller, said  
~~reverse roller being upwardly and elastically supported by an axis, said axis being supported~~  
~~at one side thereof and being rotated by a driving gear and a gear engaged with said driving~~

~~gear~~, said reverse roller being supported at a free end side of said axis and ~~arranged~~ disposed via a torque limiter, so as to be rotated in a sheet feeding direction and a direction opposite the sheet feeding direction, ~~wherein a plurality of the sheets conveyed between said feed roller and said reverse roller are separated and are conveyed one by one to the image forming device; and~~

a pressing device configured to provide a cyclic change in the pressure ~~applied between said feed roller and said reverse roller member while conveying a~~ the sheet is conveyed between said feed roller and said separation member[[,]] such that a plurality of sheets conveyed between said feed roller and said reverse roller are separated and individually conveyed to the image forming device, said pressing device being ~~arranged~~ positioned at a side of the reverse roller.

Claim 68 (withdrawn): An image forming apparatus comprising:

an image forming device;

a sheet feeding device configured to convey a sheet to said image forming device, wherein said image forming device is configured to form an image on the sheet conveyed from said sheet feeding device, said sheet feeding device including a feed roller and a friction roller, wherein said friction roller is pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein a plurality of the sheets conveyed into between said feed roller and said friction roller are separated and are conveyed one by one to said image forming device; and

a pressing device configured to provide a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing device being arranged at a side of said friction roller.

Claim 69 (original): The image forming apparatus of claim 67, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said reverse roller makes one rotation.

Claim 70 (withdrawn): The image forming apparatus of claim 68, wherein said pressing device uses a magnetic force, and said pressing device provides the cyclic change in the pressure more than one time as said friction roller makes one rotation.

Claim 71 (original): The image forming apparatus of claim 67, wherein said sheet feeding device includes a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 72 (withdrawn): The image forming apparatus of claim 68, wherein said sheet feeding device includes a sheet guiding member configured to regulate advancement of the sheets downstream of said feed roller in the sheet feeding direction.

Claim 73 (original): The image forming apparatus of claim 67, wherein all three of said feed roller, said reverse roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from said image forming apparatus.

Claim 74 (withdrawn): The image forming apparatus of claim 68, wherein all three of said feed roller, said friction roller, and said pressing device are integrally constructed as a unit, which is attachable to and detachable from said image forming apparatus.

Claim 75 (currently amended) A sheet feeding device comprising:

an axis;

a driving gear configured to rotate said axis and supporting said axis at one side

thereof;

a gear engaged with said driving gear;

a feed roller;

a reverse roller being configured to be pressed against ~~and into contact with~~ said feed roller ~~[[with]]~~ at a pressure applied between said feed roller and said reverse roller, said reverse roller being upwardly supported by ~~[[an]]~~ said axis, ~~said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear,~~ ~~said reverse roller being supported~~ at a free end side of said axis and ~~arranged~~ disposed via a torque limiter, so as to be rotated in a sheet feeding direction and a reverse direction, ~~wherein sheets conveyed into a position between said feed roller and said reverse roller are separated and are conveyed one by one;~~ and

pressing means for providing a cyclic change in the pressure ~~applied between said feed roller and said reverse roller member~~ while ~~conveying a~~ the sheet is conveyed between said feed roller and said separation member~~[[,]]~~ such that sheets conveyed into a position between said feed roller and said reverse roller are separated and individually conveyed, said pressing means being ~~arranged~~ positioned at a side of said reverse roller.

Claim 76 (withdrawn): A sheet feeding device comprising:

a feed roller;

a friction roller pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein sheets conveyed into a position between said feed roller and said friction roller are separated and are conveyed one by one; and



pressing means for providing a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing means being arranged at a side of said friction roller.

Claim 77 (currently amended): An image forming apparatus comprising:

image forming means for forming an image on a sheet;

sheet feeding means for conveying [[a]] the sheet to said image forming means, said sheet feeding means including an axis, a driving gear configured to rotate said axis and supporting said axis at one side thereof, a gear engaged with said driving gear, a feed roller and a reverse roller, ~~said reverse roller being pressed against and into contact with said feed roller~~ [[with]] at a pressure applied between said feed roller and said reverse roller, said reverse roller being upwardly supported by [[an]] said axis, ~~said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear,~~ said reverse roller being supported at a free end side of said axis and arranged disposed via a torque limiter, so as to be rotated in a sheet feeding direction and a reverse direction, ~~wherein sheets conveyed into a position between said feed roller and said reverse roller are separated and are conveyed one by one to said image forming means; and~~

pressing means for providing a cyclic change in the pressure ~~applied between said feed roller and said reverse roller member~~ while ~~conveying a~~ the sheet is conveyed between said feed roller and said separation member [[,]] such that sheets conveyed into a position between said feed roller and said reverse roller are separated and individually conveyed to said image forming means, said pressing means being ~~arranged~~ positioned at a side of said reverse roller.

Claim 78 (withdrawn): An image forming apparatus comprising:

image forming means for forming an image;

sheet feeding means for conveying a sheet to said image forming means, said sheet feeding means including a feed roller and a friction roller, said friction roller being pressed against and into contact with said feed roller with a pressure applied between said feed roller and said friction roller, said friction roller being upwardly and elastically supported by an axis, said axis being supported at one side thereof and being rotated by a driving gear and a gear engaged with said driving gear, said friction roller being arranged at a free end side of said axis via a torque limiter, so as to be rotated only in a sheet feeding direction, wherein sheets conveyed into a position between said feed roller and said friction roller are separated and are conveyed one by one to said image forming means; and

pressing means for providing a cyclic change in the pressure applied between said feed roller and said friction roller, said pressing means being arranged at a side of said friction roller.

Claim 79 (new): The image forming apparatus of claim 67, wherein said pressing device is provided on the axis of the reverse roller and includes a housing and a rotating element rotatably provided in the housing, the housing has a first magnet provided on an inner circumference of the housing, the rotating element has a second magnet provided on an outer circumference of the rotating element, and the first magnet faces the second magnet and includes convex and concave parts such that a magnetic force between the first magnet and the second magnet are altered when the reverse roller is rotated.